



State of Nevada Glossary of Terms

"As-Is" Architecture - The current state of an enterprise's architecture (see baseline architecture).

"To-Be" Architecture - The target state of an enterprise's architecture (see target architecture).

ACID transaction - A transaction is a sequence of operations that acts as a single logical unit of work. An ACID transaction has four properties, known as ACID properties, to qualify as a transaction: 1. Atomicity. Indivisible unit of work; either all or none of the data modifications are performed. 2. Consistency. When completed, a transaction must leave all data in a consistent state. 3. Isolation. No one outside of the transaction can see data in an intermediate state. 4. Durability. After a transaction has completed, its effects are permanently in place in the system.

Adaptive - Able to support a wide variety of applications and evolve as business or technology changes.

Adaptive Architecture - A set of design specifications that result in an orderly structure than can be changed to fit new circumstances without destruction of the design or plan.

Agency (state agency) - Agency or state agency refers to every public state agency, bureau, board, commission, department, division or any other unit of the Executive Department of the government of the State of Nevada.

Alignment - To be in the correct position relative to something else. See Business Alignment

Application - A set of programs and functions that perform a given task or a set of related tasks.

Application Architecture - Defines how applications are designed and how they cooperate, promotes common presentation standards to facilitate rapid training and implementation of new applications and functions. Good application architecture enables a high level of system integration, reuse of components and rapid deployment of applications in response to changing business requirements.

Application Integration Domain - A set of related applications that share common data or technologies or a set of related business processes.

Architectural Artifacts - The relevant documentation, models, diagrams, depictions, and analyses, including a baseline repository and standards and security profiles.

Architecture - The art or science of designing structures. A set of designs and specifications that results in orderly arrangement of structural components.

Architecture Product The structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time. Architecture products support the decision making process.

Architecture Repository - An information system used to store and access architectural information, relationships among the information elements, and architectural artifacts.

Architecture Requirements - A set of boundaries and framework under which a business driven enterprise architecture must operate. AR define the basic IT requirements needed to enable and support the key enterprise business strategies or business drivers of the enterprise.

Artifact - An abstract representation of some aspect of an existing or to-be-built system, component, or view. Examples of individual artifacts are a graphical model, structured model, tabular data, and structured or unstructured narrative. Individual artifacts may be aggregated.

Atomic Transaction - See *ACID transaction*.

Authentication - Authentication is the means by which assurance of the identity of parties to a transaction is established.

Baseline Architecture - the set of artifacts that portray the existing enterprise. Commonly referred to as the "As-Is" architecture.

Benchmark - A set of conditions against which a product or system is measured.

Best Practices - Practices that have been shown in actual application to be of value. Proven practices.

Blueprint - Plan or guide, commonly used in construction, laid out logically and including essential elements to address and follow as building progresses.

Business Alignment - The positioning of technology to match the needs of the business.

Business Architecture - Defines the organization and functions of the and the business processes that support those functions.

Business Continuity - Describes the processes and procedures an organization puts in place to ensure that essential functions can continue during and after a disaster. Business continuity planning seeks to prevent interruption of mission-critical services, and to reestablish full functioning as swiftly and smoothly as possible.

Business Document Also *document* - Technically, an object that defines the parameters and/or return values of the functions exposed by a service. Logically, a logical unit of information used in a business transaction, such as a purchase order.

Business Drivers - External and internal forces that create a need for business action or "drive" the organization's business, as well as the strategies that an organization defines in response to these forces. Business drivers are those "key enterprise level business strategies" that will have the most significant impact on the architecture process.

Business Entity - A business entity is an object that implements the business rules in a system application or service.

Business Objects - Logical representation of entities that are used in a given business application or service. Examples include citizens, constituents, suppliers, contractors, orders, inventory, etc.

Business Process - 1. A related set of activities that when correctly performed satisfy some business goal. 2. A process orchestrates or coordinates a series of activities needed to satisfy some business goal. 3. A business process controls the step-by-step actions of executing some work, moving the system from one state to another. At each step it may perform a business operation.

Business Process Layer - Defines the business processes inside a business application or service.

Business Process Service - A service whose primary function is to orchestrate or coordinate the actions provided by other services.

Business Service - A service whose primary function is to execute requests.

Capital Planning and Investment Control Process - A process to structure budget formulation and execution and to ensure that investments consistently support the strategic goals of the Agency.

Chief Information Officer (CIO) - The person responsible for oversight and control of an organization's information assets and information processing systems.

Component - A software object that exposes one or more interfaces and that implements logic. In object-oriented programming and distributed object technology, a component is a reusable program building block that can be combined with other components in the same or other computers in a distributed network to form an application.

Conceptual Architecture - A general design that indicates the overall intent and outline of the target architecture lays the foundation and defines the process that will be used to develop the target architecture.

Confidentiality - Confidentiality is the assurance that no one is able to eavesdrop on the transaction in progress.

Contract - A binding agreement that describes all the constraints that govern any conversation between two services; this includes all of the design-time constraints as well as the run-time constraints.

Conversation - Communication between two services about a specific topic or business entity. An instance of a contract, where two services are engaged in sending and receiving messages to each other.

Cost Allocation - The process of assigning costs of components and processes to the business units that will benefit from the processes.

Coupling - Coupling means that things are linked—that they have dependencies and that there are consequences if they are changed. A sliding scale of how tightly two services are bound together.

Critical Business Technology Assessment Program (CBTAP) - Provides guidance and tools to assist state executive branch agencies in performing a high-level business impact analysis of critical business functions. A business impact analysis is a first step towards business continuity and disaster recovery planning.

Current Technologies - Technologies that are the current standard for use within the enterprise, tested and generally accepted as standard by industry. These items comply with or support the principles listed for the discipline.

Data Life Cycle Management (DLM) - A policy-based approach to managing the flow of an information system's data throughout its life cycle: from creation and initial storage to the time when it becomes obsolete and is deleted.

Data Representation Layer - The data representation layer contains the data accessors.

Data Warehouse - A data warehouse is a central repository for all or significant parts of the data that an enterprise's various business systems collect. Data from the production databases are copied to the data warehouse so that queries can be performed without disturbing the performance or the stability of the production systems.

Data Marts - Data warehouses can become enormous with hundreds of gigabytes of transactions. As a result, subsets, known as "data marts," are often created for just one department or product line.

Database - A database is a collection of information that is organized so that it can easily be accessed, managed, and updated. Databases are sometimes classified according to their organizational approach. The most prevalent approach is the relational database, a tabular database in which data is defined so that it can be reorganized and accessed in a number of different ways. A distributed database is one that can be dispersed or replicated among different points in a network. An object-oriented programming database is one that is congruent with the data defined in object classes and subclasses. Computer databases typically contain aggregations of data records or files, such as sales transactions, product catalogs and inventories, and customer profiles.

Database Management System (DBMS) - A Database Management System (DBMS) is a computer program (or more typically, a suite of them) designed to manage a database (a large set of structured data), and run operations on the data requested by numerous clients. DBMSs control the organization, storage, retrieval, security and integrity of data in a database. A DBMS is usually an inherent part of a database product. On PCs, Microsoft Access is a popular example of a single- or small-group user DBMS. Microsoft's SQL Server is an example of a DBMS that serves database requests from multiple (client) users. Other examples include IBM's DB2, Oracle's line of database management products, and Sybase's products.

De-facto Standards - Standards that have become accepted and adopted although not originally defined by consent. Often are more important than standards that have been defined by consent of standards groups. A good example is TCP/IP which is accepted as a standard instead of the competing OSI (Open Systems Interconnect) standard which was defined by a standards group.

Desktop Computer - A single-user computer. A desktop computer typically includes a monitor, processor, keyboard, mouse, operating system and other hardware and software. Frequently referred to as a Personal Computer, PC or Mac, but may also refer to a workstation from Sun, IBM, etc. Also called a "client computer" or "client" or simply a "desktop," the term implies stationary use, whether it resides on the top of the desk or under the desk in a tower case.

Digital Certificate - an electronic "credit card" that establishes your credentials when doing business or other transactions on the Web. It is issued by a certification authority (CA). It contains your name, a serial number, expiration dates, a copy of the certificate holder's public key (used for encrypting messages and digital signatures), and the digital signature of the certificate-issuing authority so that a recipient can verify that the certificate is real.

Digital Divide - The "digital divide" is the gap in opportunities experienced by those with limited accessibility to technology especially, the Internet. This includes accessibility limitations in Social Issues (need to talk to a person, etc.), Cultural Issues (language barriers, etc.), Disability Issues (ADA, etc.), Economic Issues (access to technology devices), Learning Issues (marketing, overcoming unfamiliarity, changing habits).

Digital Signature - An electronic signature that can be used to authenticate the identity of the sender of a message or the signer of a document, and possibly to ensure that the original content of the message or document that has been sent is unchanged. Digital signatures are easily transportable, cannot be imitated by someone else, and can be automatically time-stamped. The ability to ensure that the original signed message arrived means that the sender cannot easily repudiate it later.

Digital Society - A society or community that is well advanced in the adoption and integration of digital technology into daily life at home, work and play. A Digital Society is one that is advanced in the adoption of the New Economy.

Digital-Government - The electronic delivery of government services via the Internet. A broader definition can include all electronic transactions, regardless of whether they occur on the Internet or another device.

Discipline - Logical functional areas to address when building the architecture blueprint. The descriptions of the disciplines.

Domain - Logical groupings of disciplines that form the main building blocks within the architectural framework.

Domain Teams - Teams of business and technology specialists tasked to establish the architecture principles, practices and standards in a specific domain.

Durable State - State that is stored on a durable medium such as a file system or a database.

E-Business Architecture - Defines the standards, technologies and guidelines for electronic commerce among state agencies and between state agencies and entities and outside entities.

e-Business - Electronic-business; conducting business online. The term is often used synonymously with e-commerce, but e-business encompasses more than just buying and selling of products on the Web, for example; business licensing, registration and tax payments.

e-government - The transformation of internal and external business processes toward customer-centric service delivery offered by Web-based technologies to better fulfill the purposes of government.

Earned Value Management - A management technique that relates resource planning to schedules and to technical cost and schedule requirements. All work is planned, budgeted, and scheduled in time-phased increments constituting a cost and schedule measurement baseline.

Electronic Collaboration - The interaction of individuals and groups using electronic media. Electronic collaboration technologies promote group productivity.

Electronic Signature - A paperless way to sign a document using an electronic symbol or process attached or associated with the document. Not the same as a digital signature which offers non-repudiation.

Emerging Technologies - The most current technologies. These items will usually require testing prior to acceptance by industry as the current standard. It is generally understood that emerging technologies be considered carefully before implementing in an enterprise-wide architecture.

Enterprise An organization supporting a defined business scope and mission. An enterprise is comprised of interdependent resources (people, organizations, and technology) that should coordinate their functions and share information in support of a common mission (or set of related missions).

Enterprise Architecture - 1. The set of primitive, descriptive artifacts that constitute the knowledge infrastructure of the enterprise. 2. A strategic information asset base, which defines the business, the information necessary to operate the business, the technologies necessary to support the business operations, and the transitional processes necessary for implementing new technologies in response to the changing business needs. It is a representation or blueprint. 3. An overall plan for designing, implementing and maintaining the infrastructure to support the enterprises business functions and underlying networks and systems.

Enterprise Architecture Policy - A statement governing the development, implementation, and maintenance of the enterprise architecture.

Enterprise Architecture Products - The graphics, models, and/or narrative that depict the enterprise environment and design.

Enterprise Architecture Committee – Comments and directs the Enterprise Architecture Team.

Enterprise Architecture Executive Committee - Reviews and approves the work of the Enterprise Architecture Committee and ensures appropriate agendas.

Enterprise Architecture Team - The core team responsible for the development and maintenance of the State's Architecture. The team is responsible for the documentation of the architecture and dissemination of information about the architecture.

Enterprise Business Strategies - Those highest priority strategies that significantly impact and/or set direction for programs across the enterprise. In essence, they "drive" the overall business of state government. See also Business Drivers

Enterprise Engineering - A multidisciplinary approach to defining and developing a system design and architecture for the organization.

Enterprise Life Cycle - The integration of management, business, and engineering life cycle processes that span the enterprise to align IT with the business.

Enterprise-Wide Technical Architecture - A logically consistent set of principles that are derived from business requirements, guide the engineering of an organization's systems and technology infrastructure across the various component architectures, are understood and supported by senior management, take into account the "full context" in which the architecture will be applied, and enable rapid change in business processes and the applications that enable them.

Entity - An information-sharing unit. All agencies (see definition above) are entities; so are courts and legislative bodies. Private organizations that share governmental information are also entities, as are private persons.

Extranet - A network or network of networks that can only be accessed by permission, usually protected by firewalls, or other security technology.

Federal Enterprise Architecture Framework (FEAF) - The Clinger-Cohen Act of 1996 mandated that Federal Agencies develop and maintain an enterprise IT architecture. The Federal Enterprise Architecture Framework (FEAF) was established in 1999 by the Chief Information Officers (CIO) in response to this mandate. The purpose of the FEAF is to facilitate shared development of common processes and information among government agencies.

Fiefdom - A design pattern for a collection of loosely coupled services that encapsulate shared durable state and are deployed together.

Firewall - A network device that protects networks from unauthorized entry. A firewall is a method for keeping a network secure. Firewalls are widely used to give users access to the Internet in a secure fashion as well as to separate a company's public Web server from its internal network. They are also used to keep internal network segments secure.

Framework - A basic structure that supports and gives shape. A broad outline or plan that serves to define the shape of the result. Illustration of the various architecture elements, used as a guide for assisting governments as they create enterprise architectures for their organizations.

FTP - (File Transfer Protocol) A protocol used to transfer files over a TCP/IP network (Internet, UNIX, etc.). For example, after developing the HTML pages for a Web site on a local machine, they are typically uploaded to the Web server using FTP. FTP includes functions to log onto the network, list directories and copy files. It can also convert between the ASCII and EBCDIC character codes. FTP operations can be performed by typing commands at a command prompt or via an FTP utility running under a graphical interface such as Windows. FTP transfers can also be initiated from within a Web browser by entering the URL preceded with ftp://. Unlike e-mail programs in which graphics and program files have to be "attached," FTP is designed to handle binary files directly and does not add the overhead of encoding and decoding the data.

Function - A major work element that accomplishes the mission or business of an organization, such as accounting, marketing, etc. A sub-function is defined as a component of a function such as accounts receivable, accounts payable, etc. within the accounting function.

Gap Analysis - The process of comparing an existing state with a desired state and determining what changes must be made to achieve the desired state.

GB - 1. (GB) (gigabyte) One billion bytes (technically 1,073,741,824 bytes). 2. (Gb) (gigabit) One billion bits (technically 1,073,741,824 bits). Lower case "b" for bit and "B" for byte are not always followed and often misprinted. Thus, Gb may refer to gigabyte.

Geographic Information Systems (GIS) - Software and hardware that combines discrete data with spatial data.

GIS Architecture - Defines the standards and technologies for implementation of Geographic Information Systems.

Governance - The act or process of governing. Providing authorization, direction or control.

HIPAA - Acronym for the Health Insurance Portability and Accountability Act of 1996, which addresses such items as privacy and electronic sharing of information.

Hits - The number of times a program or item of data has been accessed or matches some condition. For example, when you download a page from the Web, the page itself and all graphic elements that it contains each count as one hit to that Web site. If a search yields 100 items that match the searching criteria, those 100 items could be called 100 hits.

Home Page - The first page retrieved when accessing a Web site. It serves as a table of contents to the rest of the pages on the site or to other Web sites.

HTML (Hypertext Markup Language) - The set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup tells the Web browser how to display a Web page's words and images for the user.

IEEE - Institute of Electrical and Electronics Engineers, involved with setting standards for computers and communications.

Industry Trends - Emerging trends within the business world that impact the provision of services and information.

Information Architecture - Defines the overall data architecture. Describes the logical structure of databases and the methodology used to correlate data in multiple databases. Provides a framework for defining responsibility for data integrity and distribution.

Information Life Cycle Management (ILM) - A comprehensive approach to managing the flow of an information system's data and associated metadata from creation and initial storage to the time when it becomes obsolete and is deleted.

Infrastructure - The basic framework of an organization or operation. Infrastructure components are units of technology that support the operation of the information systems. Those components that together offer, through connectivity and computing capability, the potential for all state entities to communicate with each other using voice, video, and data. Statewide infrastructure includes enterprise systems, transport and connectivity, and activities to monitor, maintain, secure, and recover the systems.

Infrastructure Domain - A set of related underlying technologies that can be considered as a unit for determining standards and best practices.

Integration - The process of bringing together related parts into a single system. To make various components function as a connected system. The ability to access and exchange critical information electronically at key decision points throughout the enterprise.

Internet - An international network of networks based on TCP/IP protocols. 1. A large network made up of a number of smaller networks. 2. (Internet) "The" Internet is made up of more than 65 million computers in more than 100 countries covering commercial, academic and government endeavors. Originally developed for the U.S. military, the Internet became widely used for academic and commercial research. Users had access to unpublished data and journals on a huge variety of subjects. Today, the Internet has become commercialized into a worldwide information highway, providing information on every subject known to humankind. The Internet's surge in growth in the latter half of the 1990s was twofold. As the major online services (AOL, CompuServe, etc.) connected to the Internet for e-mail exchange, the Internet began to function as a central gateway. A member of one service could finally send mail to a member of another. The Internet glued the world together for electronic mail, and today, the Internet mail protocol is the world standard. Secondly, with the advent of graphics-based Web browsers such as Mosaic and Netscape Navigator, and soon after, Microsoft's Internet Explorer, the World Wide Web took off. The Web became easily available to users with PCs and Macs rather than only scientists and hackers at UNIX workstations. Delphi was the first proprietary online service to offer Web access, and all the rest followed. At the same time, new Internet service providers rose out of the woodwork to offer access to individuals and companies. As a result, the Web has grown exponentially providing an information exchange of unprecedented proportion. The Web has also become "the" storehouse for drivers, updates and demos that are downloaded via the browser. Although daily news and information is now available on countless Web sites, long before the Web, information on a myriad of subjects was exchanged via Usenet (User Network) newsgroups. Still thriving, newsgroup articles can be selected and read directly from your Web browser. Chat rooms provide another popular Internet service. Internet Relay Chat (IRC) offers multi-user text conferencing on diverse topics. Dozens of IRC servers provide hundreds of channels that anyone can log onto and participate in via the keyboard.

Internet Domain Names - An Internet domain name is an organization's unique name combined with a top-level domain name (TLD). For example, computerlanguage.com would be considered a "second level domain," although many also call it a "root domain." Following are examples of top level domains:

.com=commercial, .net=gateway or host, .org=non-profit organization, .edu=educational and research, gov= government, .mil=military agency. Int=international intergovernmental. Outside of the U.S., the top-level domains are typically the country code; for example, UK for United Kingdom.

Interoperability - The ability to function separately or together. The capability to allow users to readily share data among applications residing on varying combinations of hardware and software within and between existing networks.

Intranet - A network or network of networks based on internet technologies that are not open to access from the Internet. An in-house Web site that serves the employees of the enterprise. Although Intranet pages may link to the Internet, an intranet is not a site accessed by the general public. Using programming languages such as Java, client/server applications can be built on Intranets. Since Web browsers that support Java run under Windows, Mac and UNIX, such programs also provide cross-platform capability. Intranets use the same communications protocols and hypertext links as the Web and thus provide a standard way of disseminating information internally and extending the application worldwide at the same time. 2. The term as originally coined in the definition above has become so popular that it is often used to refer to any in-house LAN and client/server system.

ISO - The International Organization for Standardization, Geneva, is an organization that sets international standards. The U.S. member body is ANSI.

IT Governance - Cross-jurisdictional organizational structure that provides a decision-making process for the determination of the services, architecture, standards and policies for the organizations IT. (Determination of who does what and how it gets decided as to who does what.)

IT Infrastructure - The systems and network hardware and software that supports applications. IT infrastructure includes servers, hubs, routers, switches, cabling, desktop, lap and handheld devices.

ITIL (Information Technology Infrastructure Library) - a set of best practices standards for information technology (IT) service management. The United Kingdom's Central Computer and Telecommunications Agency (CCTA) created the ITIL in response to the growing dependence on information technology to meet business needs and goals. The ITIL provides businesses with a customizable framework of best practices to achieve quality service and overcome difficulties associated with the growth of IT systems.

Laptop Computer – A portable computer that usually weighs less than eight pounds. Laptops usually come with displays that use thin-screen technology and an integrated keyboard with mouse. Often called just a "laptop" or "notebook," it uses batteries for mobile use and AC power for charging the batteries and desktop use. High-end laptops provide all the capabilities of most desktop computers.

Layered Model - A way of representing the relationship of different sets of technologies, processes and protocols that infers that the interactions of the different layers are in series. Each layer interacts with the layers adjacent to it and interactions with other layers are always through the adjacent layers.

Legacy Systems - Those systems in existence and either deployed or under development at the start of a modernization program. All legacy systems will be affected by modernization to a greater or lesser extent. Some systems will become transition systems before they are retired. Other systems will simply be retired as their functions are assumed by modernization systems. Still others will be abandoned when they become obsolete. An automated system built with older technology that may be unstructured, lacking in modularity, documentation and even source code.

Lexicon - Provides a glossary and cross-reference for words that may have multiple meanings. The purpose is to create common definitions to allow for clearer understanding.

Long Running Transaction Also *saga*. - An implementation of a business process or part of a business process that contains the logic to compensate for the activities that have already been executed in case of cancellation.

Mandate - An authoritative command or instruction.

MB - 1. (MB) (megabyte) One million bytes (technically 1,048,576 bytes). 2. (MB) (motherboard) On references to basic hardware components, MB often means motherboard or mainboard. 3. (Mb) (megabit) One million bits (technically 1,048,576 bits). Lower case "b" for bit and "B" for byte are not always followed and often misprinted. Thus, Mb may refer to megabyte.

Message - A unit of information transmitted electronically from one service to another.

Metadata - Data about data. Metadata describes how and when and by whom a particular set of data was collected, and how the data is formatted. Metadata is essential for understanding information stored in data warehouses and has become increasingly important in XML-based Web applications.

Methodology - A documented approach for performing activities in a coherent, consistent, accountable, and repeatable manner.

Middleware - Software systems that facilitate the interaction of disparate components through a set of commonly defined protocols. The purpose is to limit the number of interfaces required for interoperability by allowing all components to interact with the Middleware using a common interface.

Middleware Architecture - Defines the components that create integration among the client and server systems to improve the overall usability of the distributed architecture. Middleware provides interfaces between applications and network communications and platform technologies.

Models - Representations of information, activities, relationships and constraints.

NASCIO - The National Association of State Chief Information Officers represents state chief information officers and information resource executives and managers from the 50 states, six U. S. territories and the District of Columbia. State members are senior officials from any of the three branches of state government who have executive-level and statewide responsibility for information resource management.

NASCIO Enterprise Architecture Toolkit - A governance architecture framework with roles and responsibilities and a focus on multi-level communication. The toolkit contains process models for governance and the architecture lifecycle. The Tool-Kit also includes fully populated security domain and application domain blueprints.

Network - Hardware and software components that support the exchange of information between systems.

Network Architecture - Defines the communications infrastructure. Defines the various topologies, carrier services and protocols necessary to facilitate the interconnection Nevada institutions of government and education. Included in this architecture is the definition of both internal networks and connections to external networks.

N-Tier Application - Applications built using a layered model approach. The internals of each tier are unique to the implementation but the interactions between the tiers are defined. N-tier does not relate to the number of systems involved. It relates to the defined interfaces that allow different tiers to be changed or replaced without affecting the other tiers.

Object Attributes - The characteristics of an object. The elements of data that define a given object. For example, engine size is an attribute of cars. All cars will have the attribute but the value of the attribute will differ.

Open Source - refers to any program whose source code is made available for use or modification as users or other developers see fit.

Open Standards - Open standards are publicly available specifications that provide a common method of achieving a particular goal. Open standards encourage interoperation between hardware and software platforms.

Open System - A system that supports commonly accepted standards for inter-operation with other systems.

Operating System - (sometimes abbreviated as "OS") is the program that, after being initially loaded into the computer by a boot program, manages all the other programs in a computer.

Operational Data Stores - The data warehouse is structured to support a variety of analyses, including elaborate queries on large amounts of data that can require extensive searching. When databases are set up for queries on daily transactions, they are often called "operational data stores" rather than data warehouses.

Output Management - The management of documents and reports. Output management focuses on the finished product, not the process used to create the product.

Platform Architecture - Defines the technical components of the infrastructure including client and server platforms, the operating systems and interfaces supported.

Platforms - Hardware and software systems that can be used for information processing.

Policies (and Policy) – Policies are long-term, high-level management instructions on how the organization is to be run and generally are driven by legal concerns (due diligence). Policies reflect an organization's goals, objectives, culture and are intended for broad audiences. They also are mandatory and are application to anyone – employee, contractor, temporary, etc. Special approval if the policy is not be followed (an exception) should be documented. (Yes, a policy for exceptions is necessary!). Policies drive standards, procedures and technical controls. Example: Passwords will be used.

Port - The end point or address Uniform Resource Locator (URL) of a message.

Port Type - See *service interface*.

Practices - Established or customary methods or procedures.

Principle - 1. A statement of preferred direction or practice. Principles constitute the rules, constraints, and behaviors that a bureau will abide by in its daily activities over a long period of time. 2. Essential truths upon which other truths are based. Guiding statements of position that communicated fundamental elements, truths, roles or qualities that must be exhibited by and enterprise. 3. A component of the strategic direction. In terms of the Federal Enterprise Architecture, the principles are statements that provide strategic direction to support the Federal vision, guide design decisions, serve as a tie breaker in settling disputes, and provide a basis for dispersed, but integrated, decision making.

Procedures - A set of administrative instructions for implementation of a policy or standard. Procedures are specific instructions (ordered tasks) for performing some function or action. Procedures are of a somewhat short duration, are mandatory and they reflect organizational change or environmental changes. Example: To change your password, type your old password, then a front slash and then your new password.

Process - A series of actions performed repeatedly in sequence to achieve a desired outcome. See *business process*.

Project - A discrete set of actions performed over a given period of time to achieve a given objective.

Project Management - A methodical approach to planning and guiding project processes from start to finish. The processes are guided through five stages: initiation, planning, executing, controlling, and closing. Project management can be applied to almost any type of project and is widely used to control the complex processes of software development projects.

Project Oversight Unit – The Unit helps ensure the successful implementation of information technology projects. The purpose of project oversight is to determine that a qualified project manager is assigned to the project, the project is being managed in compliance with the project plan, that sound management practices are being observed, that the project is adequately staffed, schedules are

reasonable and are being met, and to identify and take action to assist in remediating risky and potentially unsuccessful project activities and problem situations at the earliest possible time.

Proprietary - Legally made or distributed only by those holding patents or rights. Most standard operating systems and software are proprietary. Owned by a private individual or corporation.

Protocol - Rules governing transmitting and receiving of data.

Reference Data - A composition of snapshot data used by clients of a service.

Repository - An information system used to store and access architectural information, relationships among the information elements, and work products.

Saga - See *long running transaction*.

Scalability - The ability to use the same applications and systems on all classes of computers from personal computers to supercomputers.

Security - Safeguards against unauthorized access to or modification of data in systems. Must be balanced against the need for access and the rights of citizens to privacy.

Security Architecture - Defines the security standards and policies necessary to both protect the information assets of Nevada and to make the information available to the citizens and workforce.

Sequencing Plan - A document that defines the strategy for changing the enterprise from the current baseline to the target architecture. It schedules multiple, concurrent, and interdependent activities and incremental builds that will evolve the enterprise.

Service - A software component whose behaviors with respect to its clients are message driven.

Service Agent - A service whose primary functions are to help prepare a request to be submitted to other services and to help interpret a service's response to the request.

Service Façade - A service façade exposes the functionality of a system to the outside world.

Service Interface - Definition of a particular role in a process agreement.

Service Level Agreement (SLA) - is a contract between a service provider and a customer that specifies, usually in measurable terms, what services the service provider will furnish.

Service-Oriented Architecture (SOA) - The underlying structure supporting communications between services. SOA defines how two computing entities, such as programs, interact in such a way as to enable one entity to perform a unit of work on behalf of another entity. Service interactions are defined using a description language. Each interaction is self-contained and loosely coupled, so that each interaction is independent of any other interaction.

Snapshot State - A snapshot exposes a restricted view on the state of a service at a point in time. A snapshot needs not be current.

Spewak EA Planning Methodology - Formal methodology for defining architectures for the use of information in support of the business and the plan for implementing those architectures developed and published by Steven H. Spewak.

Stable Data - A snapshot whose meaning and interpretation does not change across space and time.

Standard - A prescribed or proscribed specific technical approach, solution, methodology, product or protocol, which must be adhered to in the design, development, implementation or upgrade of systems architecture (e.g., hardware/software/services).

Standards may define or limit the tools, proprietary product offerings or technical solutions, which may be used, developed or deployed by state government entities.

Standards shall be designated as either "preferred" or "mandatory".

Preferred Technology Standards

A standard, which must be complied with by state government, unless the state government entity obtains an exemption from the standard because of technical or other operational deficiencies.

Mandatory Standards

A standard, which must be complied with by state government. Exemptions are not granted or considered from mandatory standards

Standardization - The methods used to reduce or eliminate custom, one-time and seldom-used components and processes that introduce variability and potential added costs and quality problems.

Stateful Conversation - Communication between parties in which information relating to aspects of previously exchanged data must be recorded to allow meaningful exchanges subsequently.

Stateless Conversation - Communication between parties, where all messages can be interpreted independently; the service does not need to remember previous requests and responses.

Sunset Technologies - Technologies that have been phased out and cannot be used within the organization past a specified date.

System - 1. A collection of components organized to accomplish a specific function or set of functions.
2. set of different elements so connected or related as to perform a unique function not performable by the elements alone (Rechtin 1991).

Systems Development Life Cycle - Guidance, policies, and procedures for developing systems throughout their life cycle, including requirements, design, implementation, testing, deployment, operations, and maintenance.

Systems Management - The process of controlling, monitoring and reporting the status and performance of the hardware and software components.

Target Architecture - Representation of a desired future state or "to be built" for the enterprise within the context of the strategic direction. The target architecture is in two parts: Target Business Architecture—defines the enterprise future business needs addressed through new or emerging technologies Target Design Architecture—defines the future designs used to support future business needs.

Technology Baseline - An inventory of the "as is" state of technology. Identifies existing technology to determine what can be leveraged for the future and what changes must be made to achieve the desired state.

Technology Drivers - Internal business processes or needs and external innovation that influence technology. These are captured in three stages: 1. Technology Trends – Emerging trends within the technology world that are impacting how services and the IT portfolio will be provided. 2. IT Best Practices – Trends and approaches that are most successful at providing services and IT portfolio. 3. IT Principles – Those practices and approaches that the organization chooses to institutionalize to better all provided services and IT portfolio pieces.

Technology - Tools or tool systems by which we transform parts of our environment and extend our human capabilities.

Technology Investment Request (TIR) - Any Executive Branch agency wishing to invest in an IT project (new or enhancements to existing systems and applications) that costs more than \$10,000 must

develop a business case with a Technology Investment Request (TIR) form. TIRs are required for Executive Branch agencies as part of their biennial budget process as well as for interim funding of IT projects. They apply regardless of the funding source (including grant funding), as well as in situations where the funding already exists and the agency is requesting authority for expenditure. The TIR must be submitted to DoIT for review and approval prior to submittal to the Budget Division.

Technology Trends - Existing patterns of change that can be used to infer or predict the future of technology.

Template - A form used as a guide, such as a document in which the standard parts are already included and the variable parts are completed as appropriate.

Transaction - A single unit of work in which all parties must agree that the work should and can be done.

Transitional EA Components - Representation of a desired state for all or part of the enterprise for an interim milestone between the baseline architecture and the target architecture. A time- sliced set of models that represent the increments in the sequence plan.

Trust - The confidence a service has in the reliability of other services and the information that they provide.

Trust Model - A Trust Model is a framework utilized to establish secure access to multiple systems in an enterprise using one credential (typically a user-id and password) per user. In order for information owners to trust credentials that have been issued to users, the credentials must have been issued, protected and managed according to documented and agreed rules. The Trust Model establishes a standard set of processes, which include registering or identifying users, issuing credentials, using the credentials and recordkeeping and auditing.

Twilight Technologies - Technologies being phased out by the enterprise.

User Interface Process - A service whose primary function is to orchestrate or coordinate the actions provided by user interface services.

User Interface Service - A service handling the interaction with one or more humans

Web Application - Software based on the Web. This can refer to almost anything Web related, including a Web browser or other client software that can access the Web. It can refer to software that runs on Web sites or software that is stored on Web sites and downloaded to the user.

Web Hosting - Placing a customer's Web page or Web site on a commercial Web server. Many ISPs host a personal Web page at no additional cost above the monthly service fee, while multi-page, commercial Web sites are hosted at a very wide range of prices. The customer's registered domain name is typically used. A single computer can hold hundreds or even thousands of small Web sites, while larger Web sites use a dedicated computer or multiple computers.

Web Server - A computer that provides World Wide Web services on the Internet. It includes the hardware, operating system, Web server software, TCP/IP protocols and the Web site content (Web pages). If the Web server is used internally and not by the public, it may be known as an "intranet server." The term may refer to just the software and not the entire computer system. In such cases, it refers to the HTTP server that manages Web page requests from the browser and delivers HTML documents (Web pages) in response. The Web server also executes server-side scripts (CGI scripts, JSPs, ASPs, etc.) that provide functions such as database searching and e-commerce. A single computer system used to provide all the Internet services for a department or a small company would include the HTTP server (Web pages), FTP server (file downloads), NNTP server (newsgroups) and SMTP server (mail service). This system with all its services could be called a Web server. Web servers are also often

used for vertical applications. Any network device, such as the print server in the example below, can contain an internal Web server (HTTP server) as the means for configuring the unit.

Web Site - A server that contains Web pages and other files which is online to the Internet 24 hours a day.

Web-based Application - An application that is downloaded from the Web each time it is run. The advantage is that the application can be run from any computer, and the software is routinely upgraded and maintained by the hosting organization rather than each individual user. Some envision a future where everything is stored and downloaded from the Web, which is a return to the centralized processing architecture of the 1960s and 1970s.

World Wide Web - An Internet facility that links documents locally and remotely. The Web document, or Web page, contains text, graphics, animations and videos as well as hypertext links. The links in the page let users jump from page to page (hypertext) whether the pages are stored on the same server or on servers around the world. Web pages are accessed and read via a Web browser, the two most popular being Internet Explorer and Netscape Navigator. In the last half of the 1990s, the Web became "the" center of Internet activity, because the Web browser provided an easy, point and click interface to the largest collection of online information in the world. Ever since the Web became the focal point of the Internet, the amount of information has increased at a staggering rate. The Web has also turned into an online shopping mall as almost every organization has added e-commerce capabilities. In addition, the Web has become a multimedia delivery system as new browser features and plug-in extensions allow for audio, video, telephony, 3-D animations and videoconferencing. Most browsers also support the Java language, which allows applications to be downloaded from the Net and run locally. The fundamental Web format is a text document embedded with HTML tags that provide the formatting of the page as well as the hypertext links to other pages (URLs). HTML codes are common alphanumeric characters that can be typed with any text editor or word processor. Numerous Web publishing programs provide a graphical interface for Web page creation and automatically generate the codes. Many word processors and publishing programs also export their documents to HTML, thus users without learning any coding system can create Web pages. The ease of page creation has helped fuel the Web's growth. Web pages are maintained at Web sites, which are computers that support the Web's HTTP protocol. When you access a Web site, you generally first link to its home page, which is an HTML document that serves as an index, or springboard, to the site's contents. Large organizations create and manage their own Web sites. Smaller ones have their sites hosted on servers run by their Internet service providers (ISPs). Countless individuals have developed personal Web home pages as many ISPs include this service with their monthly access charge. Individuals can post their resumes, hobbies and whatever else they want as a way of introducing themselves to the world at large. The Web spawned the Intranet, an in-house, private Web site for internal users. It is protected from the Internet via a firewall that lets Intranet users out to the Internet, but prevents Internet users from coming in.

XML (Extensible Markup Language) - A flexible way to create common information formats and share both the format and the data on the World Wide Web, intranets, and elsewhere.

Zachman Framework - Classic work on the concepts of information systems architecture that defined the concept of a framework and provided a 6x6 matrix of architecture views and perspectives with products.